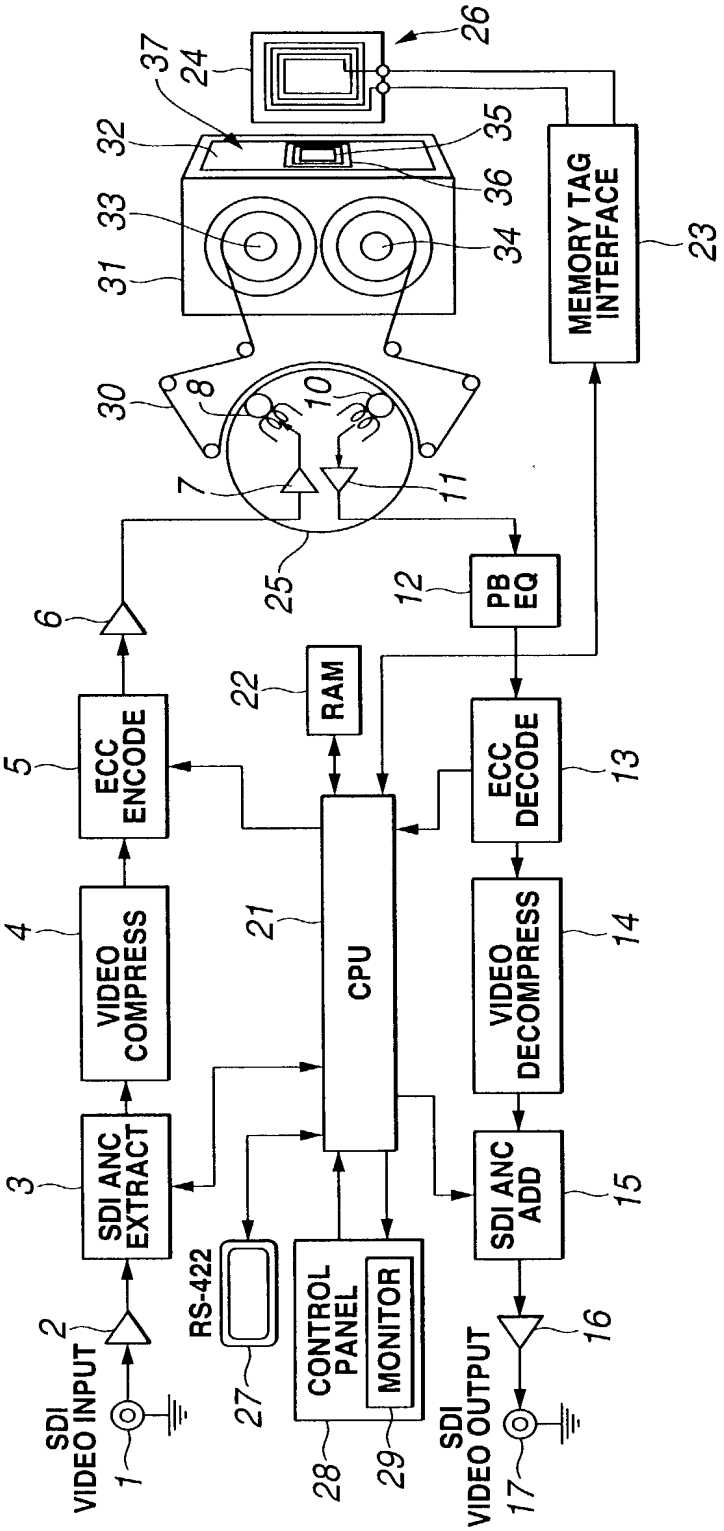

SDI VIDEO INPUT
1
2
SDI ANC EXTRACT
3
VIDEO COMPRESS
4
ECC ENCODE
5
6
7
8
10
11
25
30
31
32
33
34
35
36
37
24
26
MEMORY TAG INTERFACE
23
PB EQ
12
RAM
22
CPU
21
ECC DECODE
13
VIDEO DECOMPRESS
14
SDI ANC ADD
15
16
SDI VIDEO OUTPUT
17
RS-422
27
CONTROL PANEL
MONITOR
28
29

FIG.1

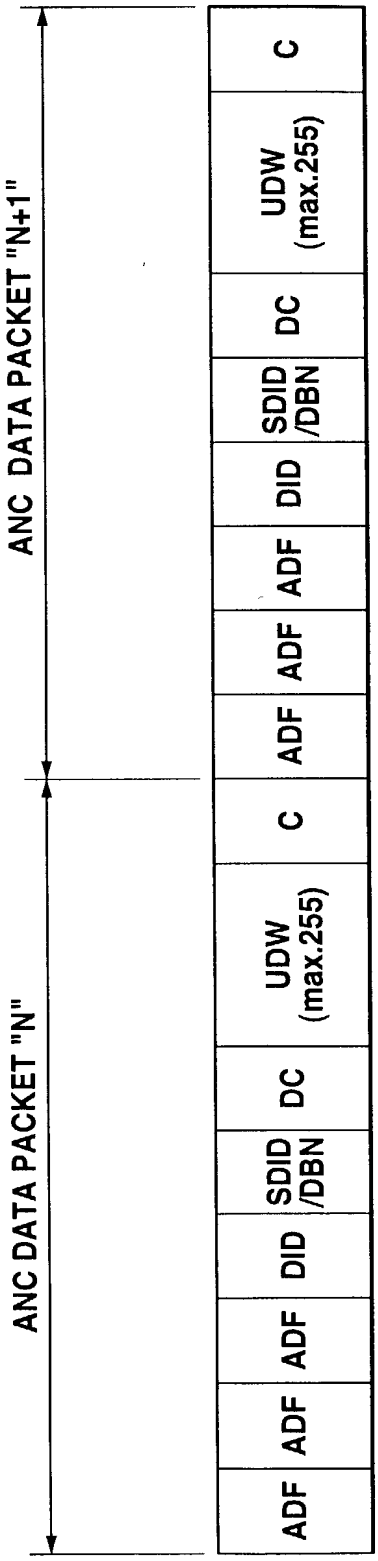

ANC DATA PACKET "N"
ANC DATA PACKET "N+1"
ADF
ADF
ADF
DID
SDID /DBN
DC
UDW (max.255)
C
ADF
ADF
ADF
DID
SDID /DBN
DC
UDW (max.255)
C

FIG.2

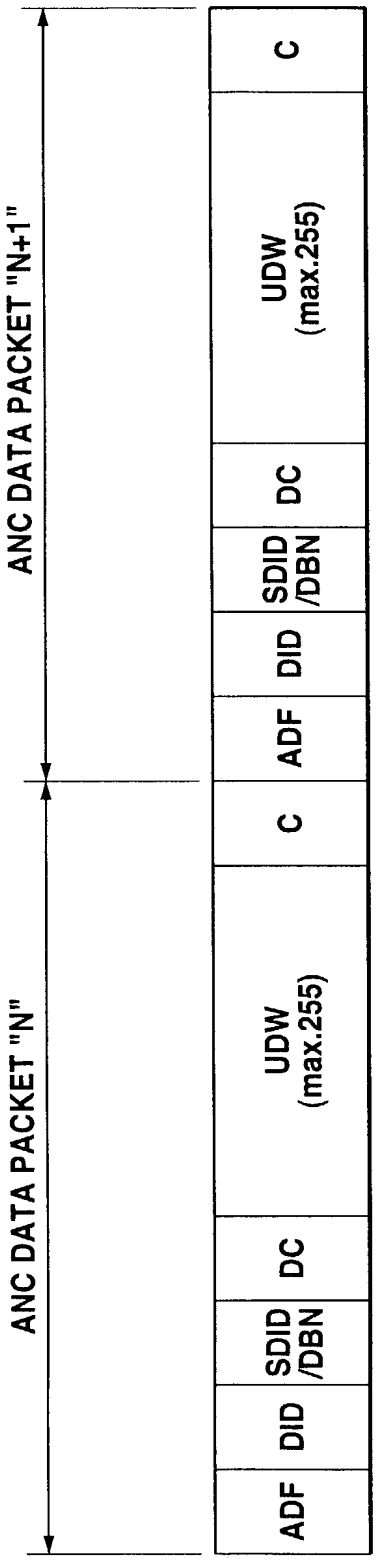

ANC DATA PACKET "N"
ADF
DID
SDID /DBN
DC
UDW (max.255)
C
ANC DATA PACKET "N+1"
ADF
DID
SDID /DBN
DC
UDW (max.255)
C

FIG.3

SMPTE label								DESCRIPTION	Value Length	Value Range
01	00	00	00	00	00	00	00	CLASS 1 ID AND LOCATOR		
01	01	00	00	00	00	00	00	GLOBALLY UNIQUE ID		
01	01	01	xx	Null	Null	Null	Null	UMID VIDEO		
01	01	02	xx	Null	Null	Null	Null	UMID AUDIO		
01	01	03	xx	Null	Null	Null	Null	UMID DATA		
01	01	04	xx	Null	Null	Null	Null	UMID SYSTEM		
01	01	10	00	00	00	00	00	INTERNATIONAL BROADCASTING STATION ID		
01	01	10	01	00	00	00	00	ORGANIZATION CATEGORY	127 bytes max.	
01	01	10	03	00	00	00	00	PROGRAM ID		
01	01	10	03	01	00	00	00	UPID		
01	01	10	03	02	00	00	00	UPN		
01	01	10	04	00	00	00	00	MEDIUM ID		
01	01	10	04	01	00	00	00	SAME AS LINE 64		
01	01	10	04	01	00	00	00	EBU ID NO		
01	01	11	00	00	00	00	00	ISO ID		
01	01	11	01	00	00	00	00	ISO AUDIO VISUAL NO.		
01	01	11	02	00	00	00	00	ISO BOOK NO.		
01	01	11	03	00	00	00	00	ISO SERIAL NO.		
01	01	11	04	00	00	00	00	ISO MUSICAL WORK CODE		
01	01	11	05	00	00	00	00	ISO PRINTED MUSIC NO.		
01	01	11	06	00	00	00	00	ISO COMMERCIAL ID		
01	01	11	07	00	00	00	00	ISO RECORDING CODE		
01	01	11	08	00	00	00	00	ISO REPORT NO.		
01	01	11	09	00	00	00	00	ISO GLOSSARY		
01	01	11	0A	00	00	00	00	ISO TEXTUAL WORK CODE		
01	01	13	01	00	00	00	00	DIGITAL OBJECT ID		
01	01	14	00	00	00	00	00	COMPOSITE ID		
01	01	14	01	00	00	00	00	SERIAL ITEM AND CONTRIBUTION ID		
01	01	14	02	00	00	00	00	BOOK ITEM AND COMPONENT ID		
01	01	14	03	00	00	00	00	AUDIO VISUAL ITEM AND COMPONENT ID		
01	01	14	04	00	00	00	00	DESTINATION ID		
01	01	15	00	00	00	00	00	SAME AS LINE 66		
01	01	15	01	00	00	00	00	INTERNET GLOBALLY UNIQUE ID		

FIG.4

SMPTE label								DESCRIPTION	Value Length	Value Range
01	03	02	02	00	00	00	00	SLOT ID	4 bytes	
01	03	02	03	00	00	00	00	OBJECT TEXT ID		
01	03	02	03	01	00	00	00	GROUP NAME	variable	
01	03	02	03	02	00	00	00	SLOT NAME	variable	
01	03	02	03	03	00	00	00	OBJECT NAME	variable	
01	04	05	00	00	00	00	00	LOCAL LOCATOR		
01	04	05	01	00	00	00	00	LOCAL MEDIUM LOCATOR		
01	04	05	01	01	00	00	00	LOCAL FILE PASS	127 bytes max.	
01	04	05	03	00	00	00	00	FILM LOCATOR		
01	04	05	03	01	00	00	00	EDGE CODE	32 chars max.	
01	04	05	03	02	00	00	00	FRAME CODE	32 chars max.	
01	04	05	03	03	00	00	00	KEY CODE	4 bytes	
01	04	05	03	04	00	00	00	Ink NO	32 chars max.	
01	04	05	03	05	00	00	00	SEGMENT START CODE	8 bytes	
01	04	10	00	00	00	00	00	PROXY LOCATOR		
01	04	10	01	00	00	00	00	PROXY TEXT	127 bytes max.	
01	04	10	02	00	00	00	00	PROXY FRAME	127 bytes max.	
01	04	10	03	00	00	00	00	PROXY SOUND	127 bytes max.	
01	04	10	04	00	00	00	00	KEY DATA	127 bytes max.	
01	04	11	00	00	00	00	00	HANDWRITE		
01	05	11	01	00	00	00	00	HANDWRITTEN NAME	variable	
01	05	01	00	00	00	00	00	TITLE		
01	05	01	01	00	00	00	00	TITLE TYPE	127 bytes max.	
01	05	01	02	00	00	00	00	MAIN TITLE	127 bytes max.	
01	05	01	03	00	00	00	00	SUB TITLE	127 bytes max.	
01	05	01	04	00	00	00	00	SERIES NO.	32 chars max.	
01	05	01	05	00	00	00	00	EPISODE NO.	32 chars max.	
01	05	01	06	00	00	00	00	SCENE NO.	32 chars max.	
01	05	01	07	00	00	00	00	TAKE NO.	2 bytes	
01	10	00	00	00	00	00	00	OWNER		
01	10	01	00	00	00	00	00	OWNER UNDER CISAC		
01	10	01	01	00	00	00	00	CONTACT PERSON		
01	10	02	00	00	00	00	00	ID UNDER AGICOA		

FIG.5

SMPTE label								DESCRIPTION	Value Length	Value Range
04	01	01	00	00	00	00	00	VIDEO'S BASIC CHARACTERISTIC		
04	01	01	01	00	00	00	00	VIDEO SOURCE DEVICES AND APPARATUSES	32 chars max.	
04	01	01	02	00	00	00	00	OE CONVERSION METHOD		
04	01	01	02	01	00	00	00	GAMMA CHARACTERISTIC		
04	01	01	02	01	01	00	00	GAMMA FORMULA	4 chars max.	See types dictionary
04	01	01	02	01	02	00	00	GAMMA	8 bytes	
04	01	01	02	02	00	00	00	BRIGHTNESS COMPUTATION	4 chars max.	See types dictionary
04	01	01	02	03	00	00	00	COLORIMETRI CODE	4 chars max.	See types dictionary
04	01	01	03	00	00	00	00	SCANNING INFORMATION		
04	01	01	03	01	00	00	00	COMPONENT SEQUENCE	4 chars max.	See types dictionary
04	01	01	03	02	00	00	00	COLOR FRAME INDEX	1 bytes	00h=default,01h-07h=field number
04	01	01	03	03	00	00	00	VERTICAL RATE	1 bytes	See types dictionary
04	01	01	03	04	00	00	00	FRAME RATE	1 bytes	See types dictionary
04	01	01	04	00	00	00	00	ASPECT RATIO	1 bytes	See types dictionary
04	01	01	00	01	00	00	00	NO. OF LINES		
04	01	01	01	01	01	00	00	TOTAL NO. OF LINES/FRAME	2 bytes	
04	01	01	02	01	02	00	00	ACTIVE LINES/FRAME	2 bytes	
04	01	01	03	01	03	00	00	LEADING EDGE	4 bytes	
04	01	01	04	01	04	00	00	TRAILING EDGE	4 bytes	
04	01	01	04	02	00	00	00	ASPECT RATIO STANDARD		
04	01	01	04	02	01	01	00	ASPECT RATIO		
04	01	01	04	02	01	01	01	IMAGE ASPECT RATIO	1 bytes	
04	01	01	04	02	01	01	02	SAME AS ABOVE	8 bytes	
04	01	01	04	02	01	02	00	ASPECT RATIO BY SENSOR	1 bytes	See types dictionary
04	01	01	04	02	02	00	00	STORAGE HEIGHT	4 bytes	
04	01	01	04	02	03	00	00	STORAGE WIDTH	4 bytes	
04	01	01	04	02	04	00	00	SAMPLE HEIGHT	4 bytes	
04	01	01	04	02	05	00	00	SAMPLE WIDTH	4 bytes	
04	01	01	04	02	06	00	00	SAMPLE X OFFSET	4 bytes	
04	01	01	04	02	07	00	00	SAMPLE Y OFFSET	4 bytes	
04	01	01	04	02	08	00	00	DISPLAY HEIGHT	4 bytes	
04	01	01	04	02	09	00	00	DISPLAY WIDTH	4 bytes	
04	01	01	04	02	0A	00	00	DISPLAY X OFFSET	4 bytes	

FIG.6

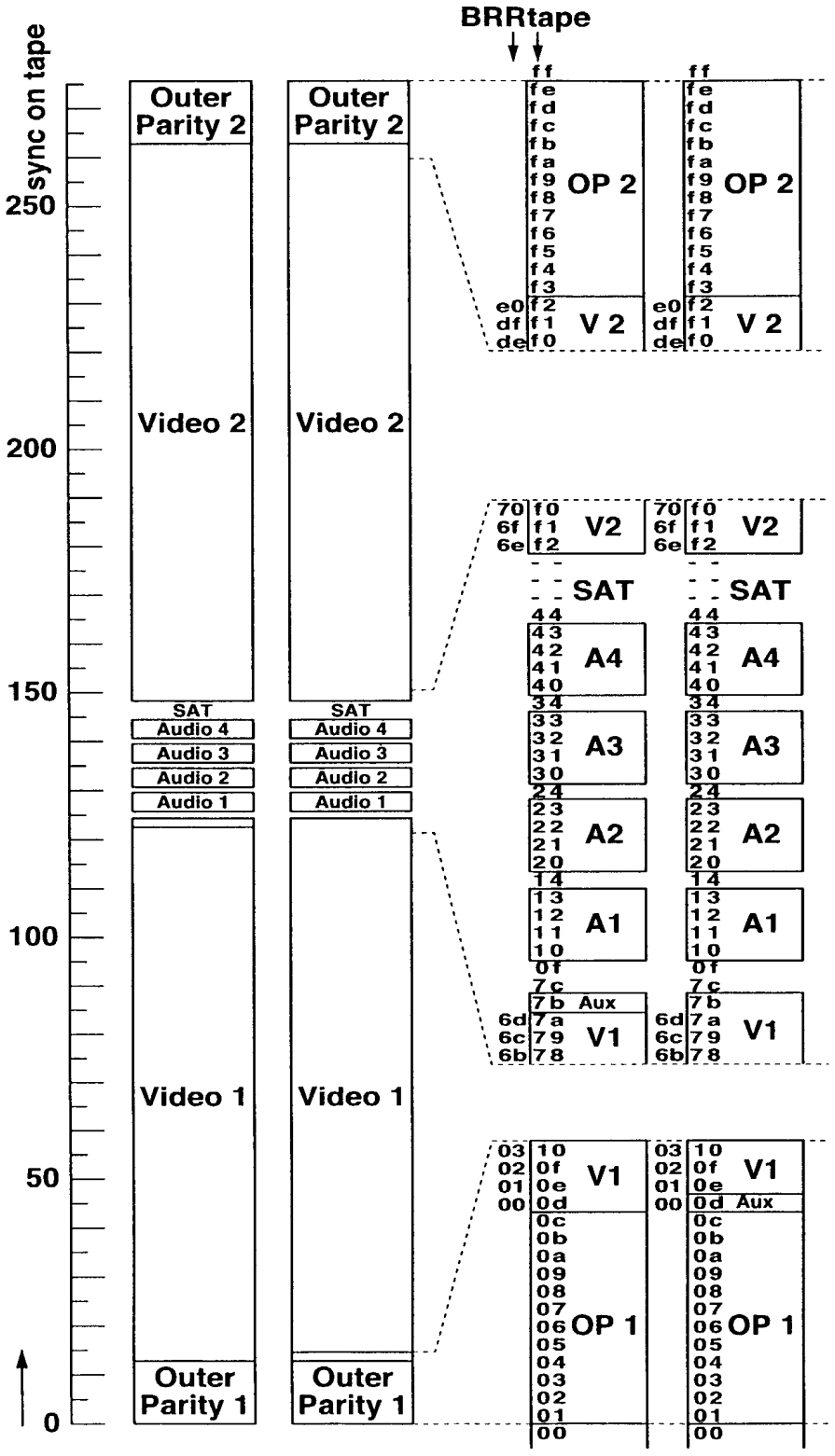

BRRtape
sync on tape
250
200
150
100
50
0
Outer Parity 2
Video 2
SAT
Audio 4
Audio 3
Audio 2
Audio 1
Video 1
Outer Parity 1
OP 2
V 2
SAT
A4
A3
A2
A1
Aux
V1
OP 1

FIG.7

Category	Data No.	Byte Count	Assignment
1	D0 --> D33	34	Activity Map
	D34 --> D35	2	Reserved
2	D36 --> D39	4	VITC TC
	D40 --> D43	4	VITC UB
	D44	1	Check Sum of VITC
	D45	1	Reserved
3	D46 --> D47	2	REC ID
	D48 --> D51	4	Reserved
4	D52 --> D53	2	Model Name
	D54 --> D56	3	VTR Serial No.
	D57	1	Destination
5	D58 --> D61	4	Date of Recording
6	D62	1	VTR status
	D63 --> D67	5	Reserved
7	D68 --> D125	58	Reserved
8	D126 --> D169	44	Meta-data
9	D170 --> D215	46	Reserved
10	D216	1	Not Used

FIG.8

Category	Assignment	Data No.	DESCRIPTION
2	VITC TC	D36 --> D39	VITC TC data D36:Frame D37:Second D38:Minute D39:Hour
	VITC UB	D40 --> D43	VITC TC data D36:Frame D37:Second D38:Minute D39:Hour
	Check SUM	D44	VALUE RESULTED FROM INTEGRATION OF D36 TO D43 AND INVERSION OF INTEGRATED VALUE
3	REC_ID	D46,D47	REC_ID=Sec+Min+Hour+0x0011 +(VALUE RESULTED FROM LEFTWARD SHIFT BY 8 BITS OF FRAME COUNTER)
4	Model Name	D52,D53	
	VTR Serial No.	D54 --> D56	Serial No.
	Destination	D57	
5	Date of Recording	D58 --> D61	
6	VTR status	D62	INFORMATION ON RECORDING FREQUENCY AND NUMBER OF LINES
			B0:EXISTENCE OR ABSENCE OF 0.1% WITH RESPECT TO Frame FREQUENCY 0:0.1% ON 1:0.1% OFF
			B1:NUMBER OF VALID LINES 0:1035 1:1080
			B2:SELECTION OF SDI OR SDTI 0:SDI 1:SDTI(DUB)
			B4,B3:Frame FREQUENCIES 00:30Hz 01:25Hz 10:24Hz
			B5:SELECTION OF Interlace OR PsF 0:Interlace 1:PsF
			RELATION BETWEEN B5,B4,B3 AND B0 AND SYSTEM FREQUENCY B76543210 XX000XX0 59.94i XX000XX1 60i XX001XX1 50i XX100XX0 29.97PsF XX100XX1 30PsF XX101XX1 25PsF XX110XX0 23.98PsF XX110XX1 24PsF

FIG.9

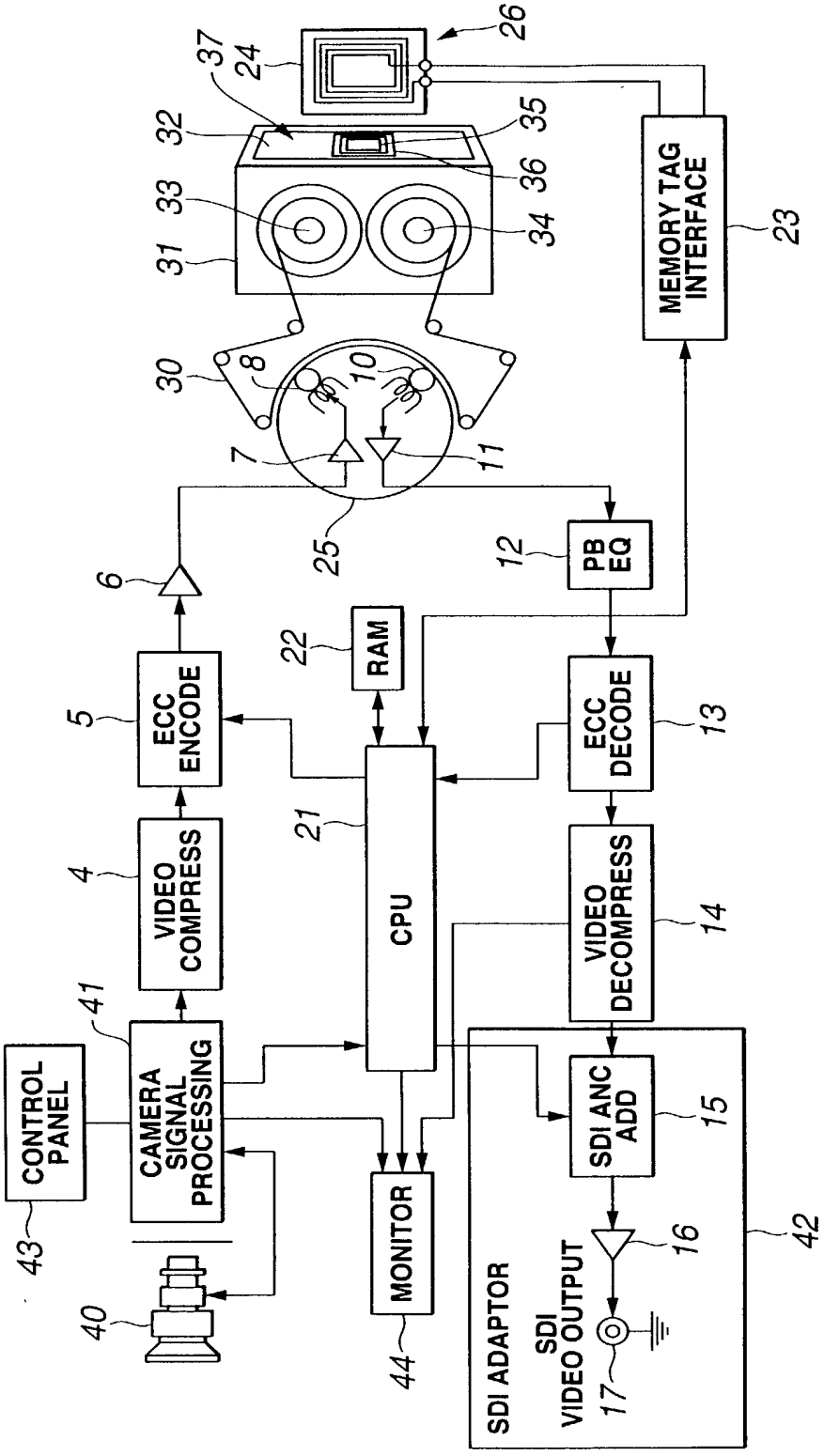


FIG.10

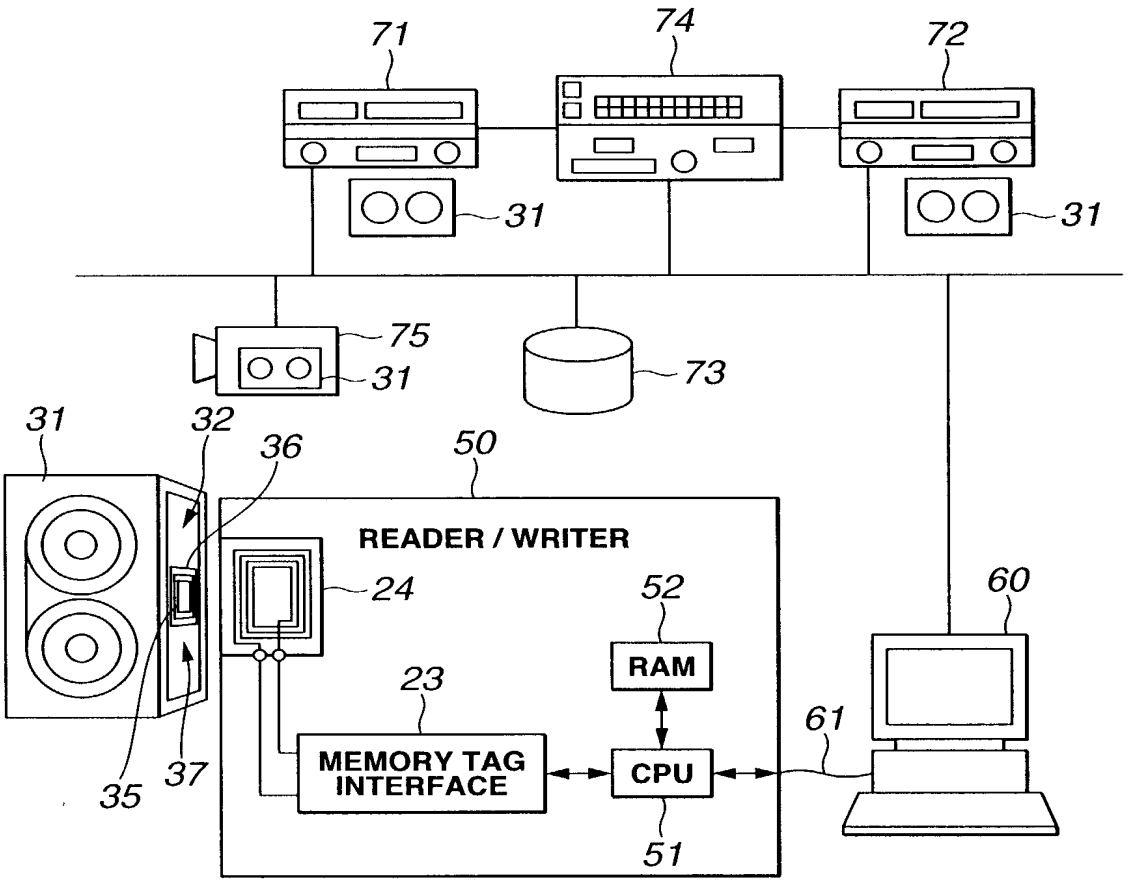
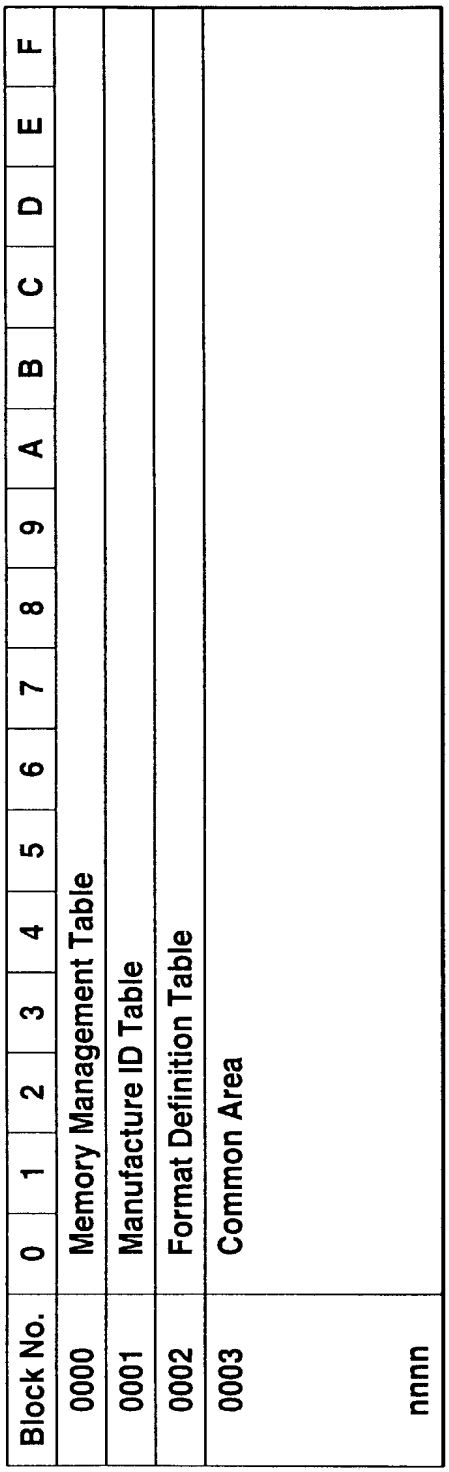

71
74
72
31
31
75
31
73
31
32
36
50
READER / WRITER
24
52
RAM
60
23
61
MEMORY TAG INTERFACE
CPU
35
37
51

FIG.11



Block No.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0000	Memory Management Table															
0001	Manufacture ID Table															
0002	Format Definition Table															
0003	Common Area															
nnnn																

FIG.12

Offset Address (Byte)			
0	Memory_size		04h
1		(Hamming 8/4 code)	00h
2	Manufacture_code	MANUFACTURER	03h
3		(Hamming 8/4 code)	00h
4	Version	VERSION	01h
5	Lot_number		
6			
7	Reserve	00h	00h
8	Application_id	APPLICATION (01h Read/Write Media)	01h
9		(Hamming 8/4 code)	
10	Media_id	LABEL SHAPE	82h
11		(Hamming 8/4 code)	00h
12	Application_id	Reserve	00h
13	Dependent Field		00h
13			00h
13			00h

FIG.13

Offset Address	MSB 7	6	5	4	3	2	1	LSB 0
0	Reserve	Memory_size=(bit0~bit6)× 256Bytes						
1	00h							

FIG.14

Offset Address	MSB 7	6	5	4	3	2	1	LSB 0
5	<Day>					<Month		
6	>	<Year>						UD

FIG.15

Offset Address (Byte)		
0	VIDEO SOURCE DEVICE ID	2 DIGITS (BCD) (VIDEO SOURCE DEVICE ID AT MANUFACTURER)
1	ID	HUNDRED THOUSANDS AND TEN THOUSANDS (BCD)
2	ID	THOUSANDS AND HUNDREDS (BCD)
3	ID Reserve	TENS AND ONES (BCD)
4	Reserve	Reserve 00h
5 6 7 8 9 10 11 12 13 14 15	(FIXED VALUE)	7Fh,02h,00h,00h,01h,05h,20h,OFFh,OFFh,OFFh, OFFh

FIG.16

Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
Media_ID	Lot_Number			ID (Block #0001 byte0~byte4)			

FIG.17

FIG.18

P1 = 1 ⊕ D1 ⊕ D3 ⊕ D4
P2 = 1 ⊕ D1 ⊕ D2 ⊕ D4
P3 = 1 ⊕ D1 ⊕ D2 ⊕ D3
P4 = 1 ⊕ P1 ⊕ D1 ⊕ P2 ⊕ D2 ⊕ P3 ⊕ D3 ⊕ D4

⊕ EXCLUSIVE OR

FIG.19

HEX.	HAMMING BASE 8/4 BINARY
0	10101000
1	00001011
2	00100110
3	10000101
4	10010010
5	00110001
6	00011100
7	10111111
8	01000000
9	11100011
A	11001110
B	01101101
C	01111010
D	11011001
E	11110100
F	01010111

FIG.20

LOW	HIGH
04h	00h

FIG.21

Offset Address (Byte)		
0	Keyword	KEY CODE FOR REWRITING BLOCK NO. 0002
1	Code	FFh AND FEh FIXED VALUES
2	Application Name &	APPLICATION NAME
12	Version	
13	WriteProtect	0:Write Enable 1:Write Disable
14	Country	COUNTRY NO. (BCD) EX. UNDEFINED 00h JAPAN 00h USA 00h
15	Number	00h 81h 01h

FIG.22

Block No.	Address	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
#0003	0030	<							Cassette ID								
#0004	0040				>	<				Data Base Key							
#0005	0050								>	<							
#0006	0060								Title								>
#0007	0070								Administrator								
#0008	0080			Serial No.						Model Name							
#0009	0090	Pointer			EOSR_ID		RS	RT		EOS Point			Thread			Update	
#000A	00A0	DataTOPP			FAT Definition				Reserve					FQ		ADStatus	
#000B	00B0								Data Area								
↓	↓								↓ ↓								

FIG.23

Byte0	Byte1	Byte2	Byte3
LL	LH	HL	HH (NUMBER OF SIGNIFICANT DIGITS)

FIG.24

BYTE0	BYTE1
L	H
Max. FFFFh	

FIG.25

MSB7	6	5	4	3	2	1	LSB0
NOT YET MEASURED	TOP/ END	(N EOT)	END OF TAPE	CASSETTE SIZE 00:S,01:M,10:L	Reserve		

FIG.26

TAPE STATUS	Bit6	Bit4
TOP	0	1
MIDDLE	0	0
END	1	1

FIG.27

	MSB 7	6	5	4	3	2	1	LSB 0
DATA-1	CF	DF	10F		1F			
DATA-2			10S		1S			
DATA-3			10M		1M			
DATA-4			10H		1H			

FIG.28

BYTE0	BYTE1
L	H
Max. 7FFFh	

FIG.29

Block No.	Address	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
#0009	0090	00	06	00	00	00	00	00	00	00	00	07	00	19	98	05	06
#000A	00A0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
#000B	00B0	01	00	15	59	59	23	00	00	00	00	00	00	00	00	00	00

FIG.30

BYTE0	BYTE1
L	H
Max. FFFFh	

FIG.31

Offset Address	MSB 7	6	5	4	3	2	1	LSB 0
0	Reserved							Pscked FAT Count
1	Stored FAT Count (LOWER 8 bits)							
2	Stored FAT Count (UPPER 8 bits)							

FIG.32

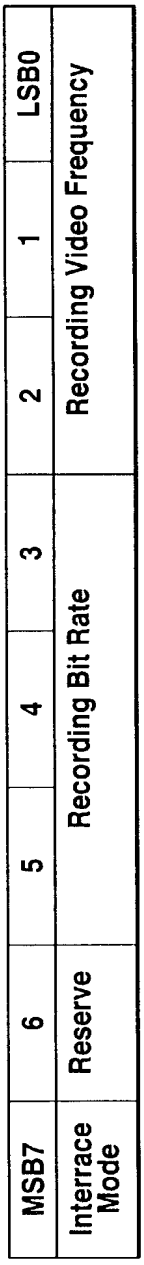

MSB7
6
5
4
3
2
1
LSB0
Interrace Mode
Reserve
Recording Bit Rate
Recording Video Frequency

FIG.33

Offset Address	MSB 7	6	5	4	3	2	1	LSB 0
0	AUDIO Status(CH-2)				AUDIO Status(CH-1)			
1	AUDIO Status(CH-4)				AUDIO Status(CH-3)			
2	AUDIO Status(CH-6)				AUDIO Status(CH-5)			
3	AUDIO Status(CH-8)				AUDIO Status(CH-7)			

FIG.34

Block No.	Address	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
#000B	00B0	< Extended Area Format ID								Format Version							
#000C	00C0	Reel Name								EDL File Name							
#000D	00D0	Stocked Floor No.				Stocked Shelf No.						Stocked Step No.		Stocked Position			
#000E	00E0	Reserve															
#000F	00F0	Reserve															
#0010	0100	<															
#0011	0110	Comment															
#0012	0120	>															
#0013	0130																
↓	↓	↓ ↓															

FIG.35

2	4	4	4	3	4	1	1	4	4	Max.53	ARBITRARY (Bytes)
Status	CUE Point	IN Point	OUT Point	Scene No.	Cut No.	Take No.	Re-Served	Real Time	Date	UMID	Additional Information

Bit NOS.15 14 13,...,0

FIG.36

Status		CUE DATA			
01h	00h				

FIG.37

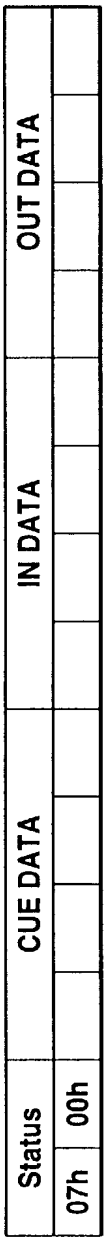


FIG.38


Classification
Flow/Mode/ DataSize (UPPER)
DataSize (LOWER)
Data

FIG.39

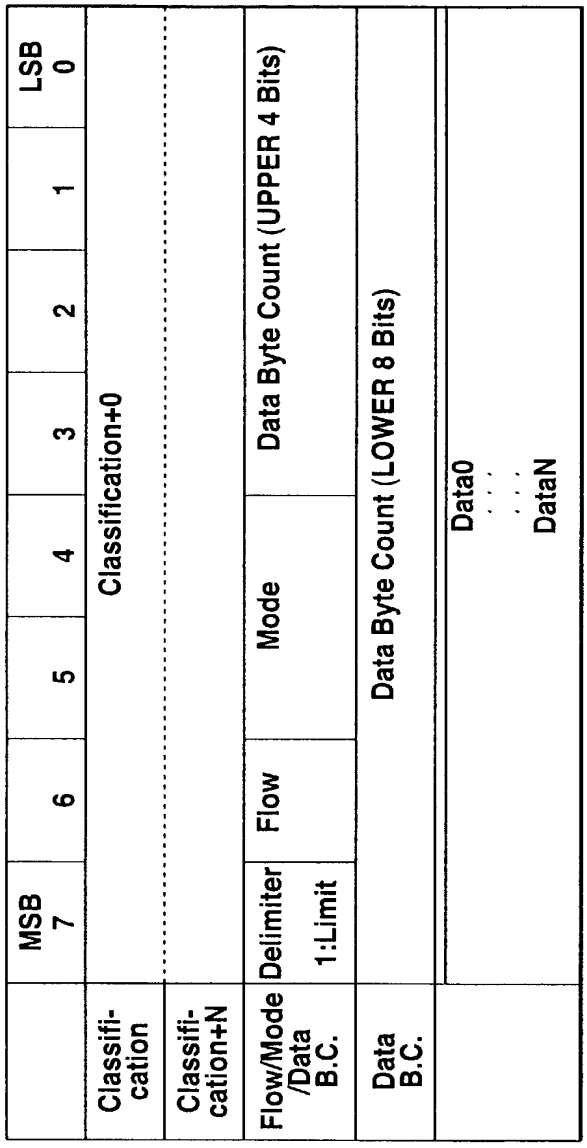

MSB 7
6
5
4
3
2
1
LSB 0
Classification+0
Classification+N
Flow/Mode /Data B.C.
Delimiter
1:Limit
Flow
Mode
Data Byte Count (UPPER 4 Bits)
Data Byte Count (LOWER 8 Bits)
Data B.C.
Data0
DataN

FIG.40

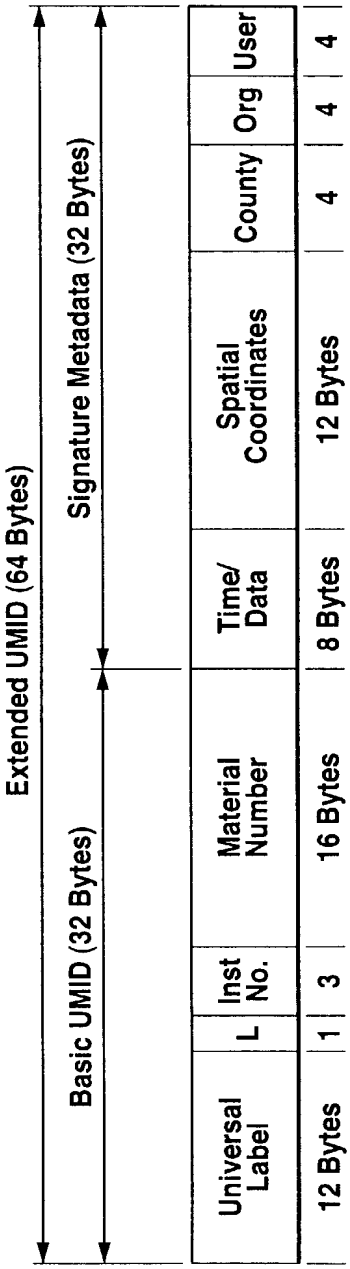

Extended UMID (64 Bytes)
Basic UMID (32 Bytes)
Signature Metadata (32 Bytes)
Universal Label
L
Inst No.
Material Number
Time/ Data
Spatial Coordinates
County
Org
User
12 Bytes
1
3
16 Bytes
8 Bytes
12 Bytes
4
4
4

FIG.41

Time Snap(data omitted)				Rnd	
Frame	Second	Minute	Hour	Lower	Upper

FIG.42

Universal Label		Instance Number			Material Number (16 Bytes)															
					Time Snap (8 Bytes)								Rnd		Machine Node (6 Bytes)					
11th	12th	low	mid	up	Frame	Sec	Min	Hour	MJDl	MJDm	MJDu	Tzone	Low	up	1st	2nd	3rd	4th	5th	msd
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

FIG.43

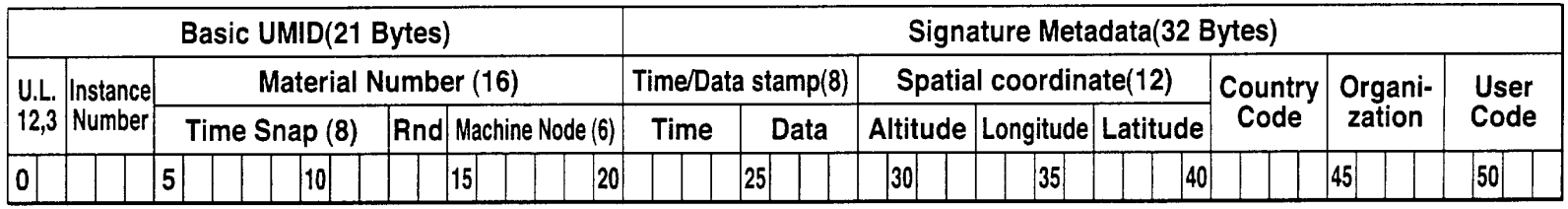


FIG.44

10070239

FIG.45A

01	84	00	30	59	23	04	11	00	00	00	00	29	52	59	10	95	44	05	97	DF	3D	89	27	00	02	04	43
FLAG		CUE				UMID																2E	D5				

FIG.45B

01	82	00	45	59	23	12	00	00	11
FLAG		CUE				UMID			

06	0E	2B	34	01	01	01	01	01	05	01	02	00	00	00	00	00	0D	54	68	65	20	54	65	6C	65	2D	46	69	6C	65
DECLARATION									MAIN TITLE CODE								LENGTH	13 ASCII CHARACTERS REPRESENTING TITLE ("The Tele-File")													

FIG.46

06	10	00	00	00	01	00	00	05	01	4D	80	16	01	05	01	02	00	00	00	00	00	0D	54	68	65	20	54	65	6C	65	2D	46	69	6C	65
FLAG		In 01:00:...				Out 01:05:...				HEADER			MAIN TITLE CODE									LENGTH	13 ASCII CHARACTERS REPRESENTING TITLE ("The Tele-File")													

FIG.47

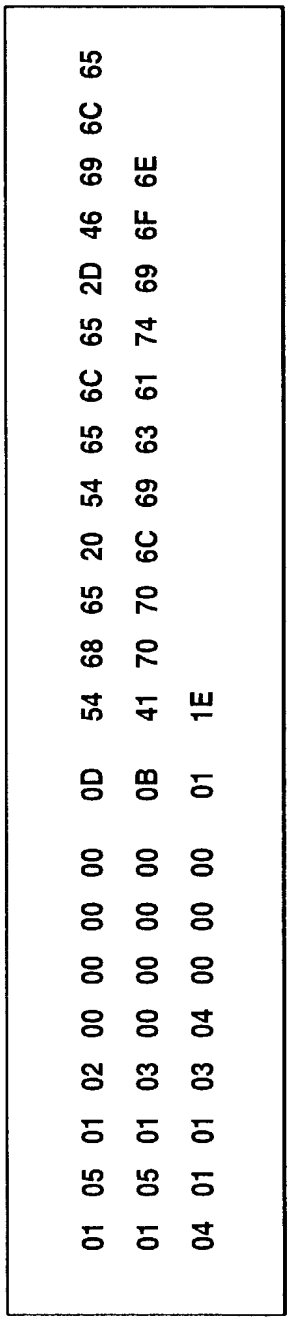

01 05 01 02 00 00 00 00 00 0D 54 68 65 20 54 65 6C 65 2D 46 69 6C 65
01 05 01 03 00 00 00 00 00 0B 41 70 70 6C 69 63 61 74 69 6F 6E
04 01 01 03 04 00 00 00 00 01 1E

FIG.48

```
01 10  00 30 58 00  4D 80 0B  04 01 01 03 04 00 00 00  01 1E
01 10  00 00 00 01  4D 80 16  01 05 01 02 00 00 00 00  0D 54 68 65 20  ...
01 10  00 00 05 01  4D 80 14  01 05 01 03 00 00 00 00  0B 41 70 70 6C  ...
01 00  00 00 10 01
```

FIG.49

Flag1 [bit2,1]	Universal Label(12 Bytes)												L	Instance			Time Snap(8 Bytes)								RND	Machine Node(6 Bytes)						Signature Meta
Least [01]	#06	#0A	#2B	#34	#01	#01	#01	#01	#01	p	p	(p)	p	p	p				p	p	p	p			p	p	p	p	p	p	p for Extended
Basic [10]	#06	#0A	#2B	#34	#01	#01	#01	#01	#01			#13																			
extended [11]	#06	#0A	#2B	#34	#01	#01	#01	#01	#01			#33																			

FIG.50

```
3FF 000 000 2D8          ...EAV
000 3FF 3FF 2F0 101 120  ...ANC for Meta-data, data count=32
206 10A 22B 134 101 101 101 101 101 101 104 211  ...universal label
113                                                  ...length
200 200 200                                          ...instance
129 152 259 110 295 244 205 197                      ...time snap
1DF 13D                                              ...random
189 227 200 102 104 143                              ...machine node
```

FIG.51

```
3FF 000 000 2AC          ...SAV
000 3FF 3FF 2F0 101 14C  ...ANC for Meta-data, data count=76
206 10E 22B 134 101 101 101 101 205 101 102 200 200 200 200
10D 154 168 265 120 154 265 26C 265 22D 146 269 26C 265   ...main title
206 10E 22B 134 101 101 101 101 205 101 203 200 200 200 200
10B 241 170 170 26C 269 263 161 274 269 26F 16E           ...sub title
206 10E 22B 134 101 101 101 101 104 101 101 203 104 200 200 200
101 21E                                                   ...frames
```

FIG.52

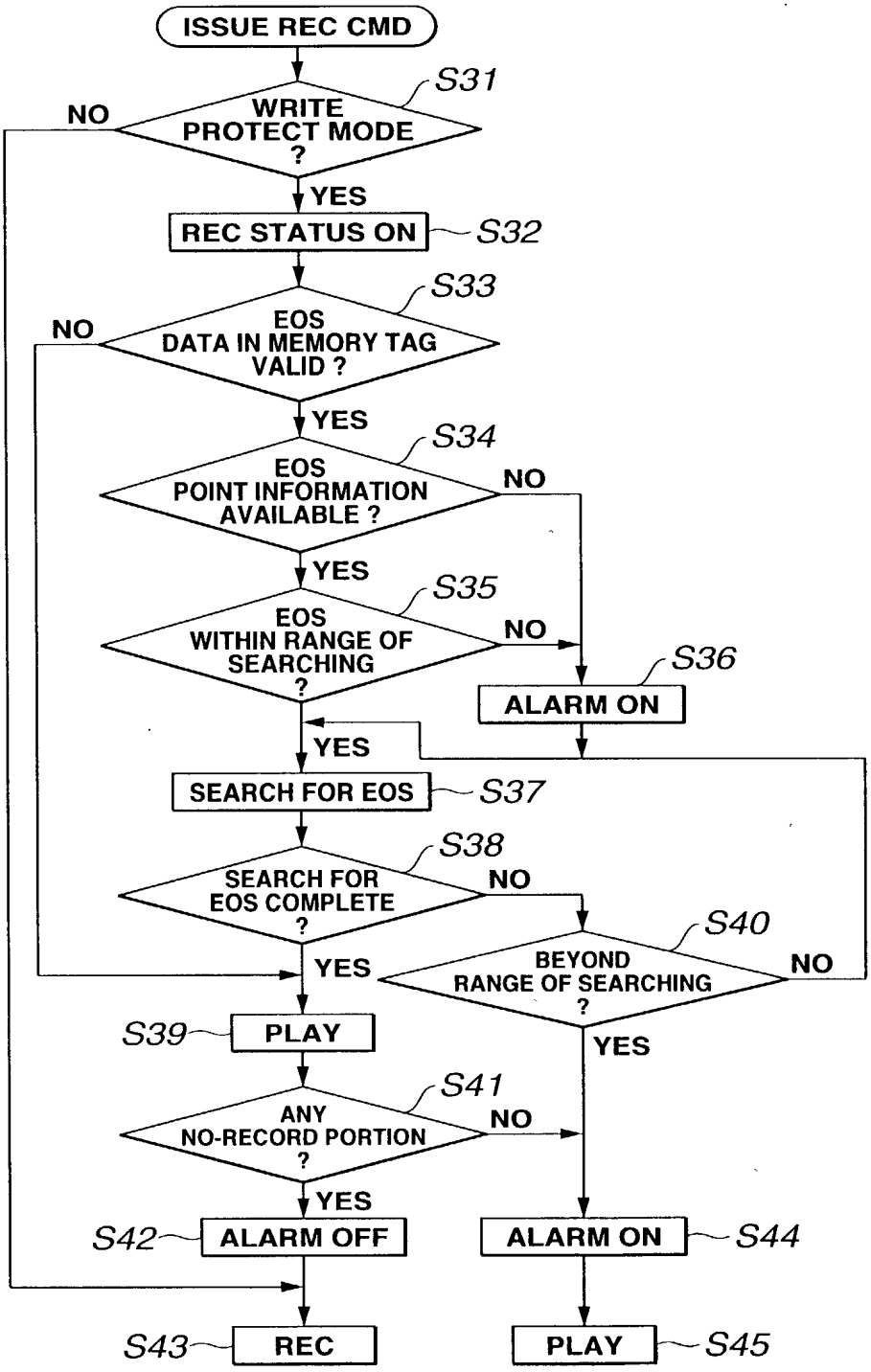

ISSUE REC CMD
S31
WRITE PROTECT MODE ?
NO
YES
REC STATUS ON
S32
S33
EOS DATA IN MEMORY TAG VALID ?
NO
YES
S34
EOS POINT INFORMATION AVAILABLE ?
NO
YES
S35
EOS WITHIN RANGE OF SEARCHING ?
NO
S36
ALARM ON
YES
SEARCH FOR EOS
S37
S38
SEARCH FOR EOS COMPLETE ?
NO
YES
S40
BEYOND RANGE OF SEARCHING ?
NO
YES
S39
PLAY
S41
ANY NO-RECORD PORTION ?
NO
YES
S42
ALARM OFF
ALARM ON
S44
S43
REC
PLAY
S45

FIG.53

FIG.54A

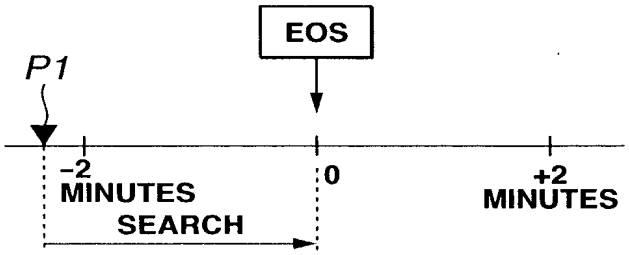


FIG.54B

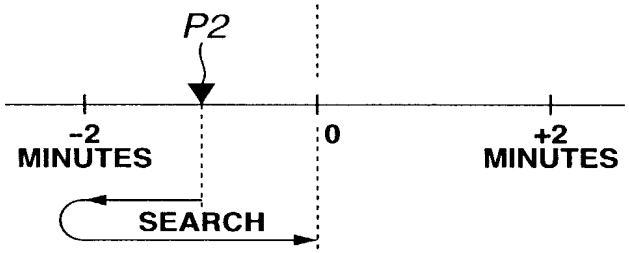


FIG.54C

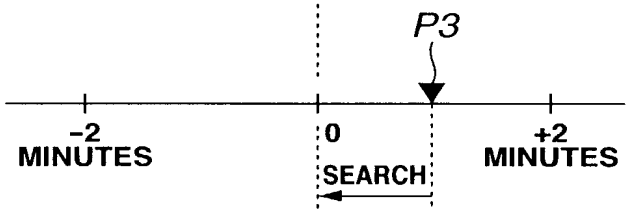
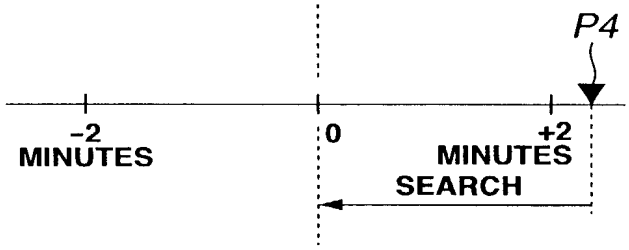


FIG.54D



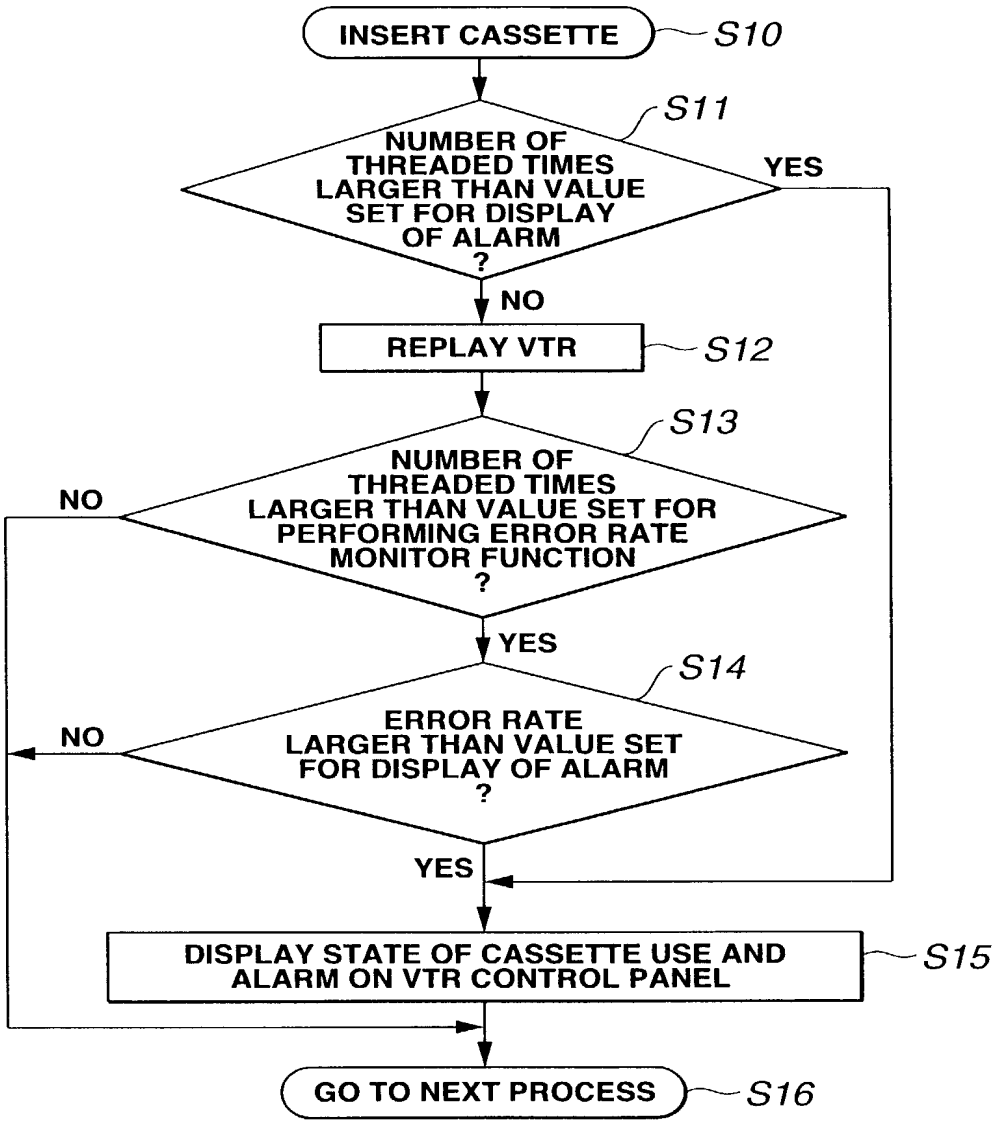

INSERT CASSETTE
S10
S11
NUMBER OF THREADED TIMES LARGER THAN VALUE SET FOR DISPLAY OF ALARM ?
YES
NO
REPLAY VTR
S12
S13
NUMBER OF THREADED TIMES LARGER THAN VALUE SET FOR PERFORMING ERROR RATE MONITOR FUNCTION ?
NO
YES
S14
ERROR RATE LARGER THAN VALUE SET FOR DISPLAY OF ALARM ?
NO
YES
DISPLAY STATE OF CASSETTE USE AND ALARM ON VTR CONTROL PANEL
S15
GO TO NEXT PROCESS
S16

FIG.55

TAPE ID	TITLE	INTENDED USE	NUMBER OF THREADED TIMES	JUDGE	COMMENT
HD-10001	FROM SOUTHERN COUNTRY	LIBRARY	6	EXCELLENT	
D2-22029	OSAKA KIN-YU-DO	DRAMA	20	FAIR	
SX-23478	"MIMI-NO-KUNI" WORDS OF PRIME MINISTER HAYASHI	SHARING	100	NOT FAIR	TO BE VOIDED ON JUNE 19,2000
IMX-67870	K2 GRAND PRIX	SHARING	20	GOOD	

FIG.56

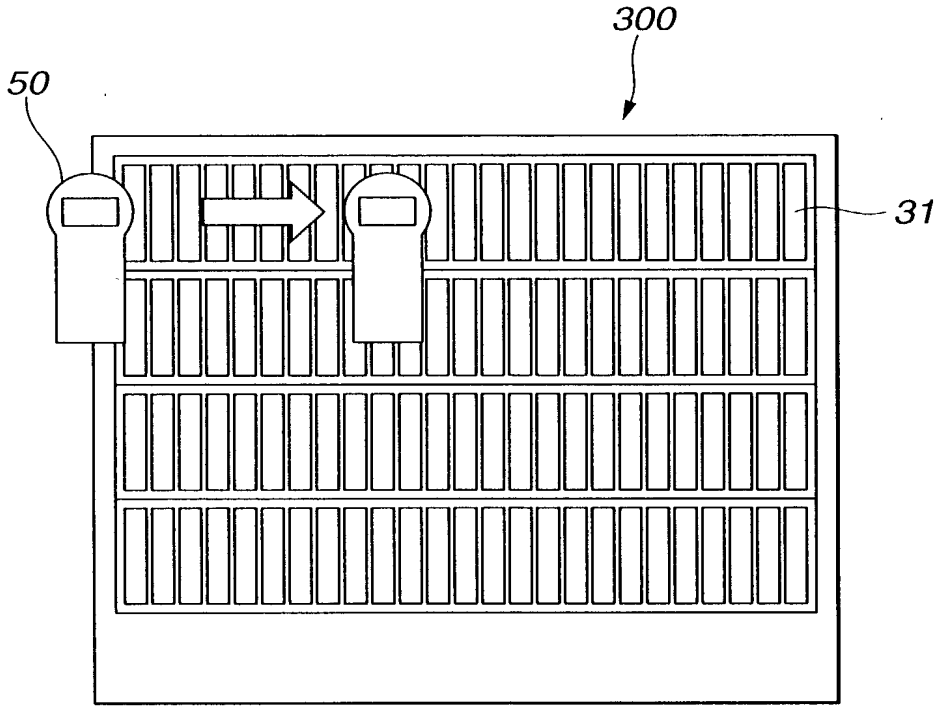


FIG.57

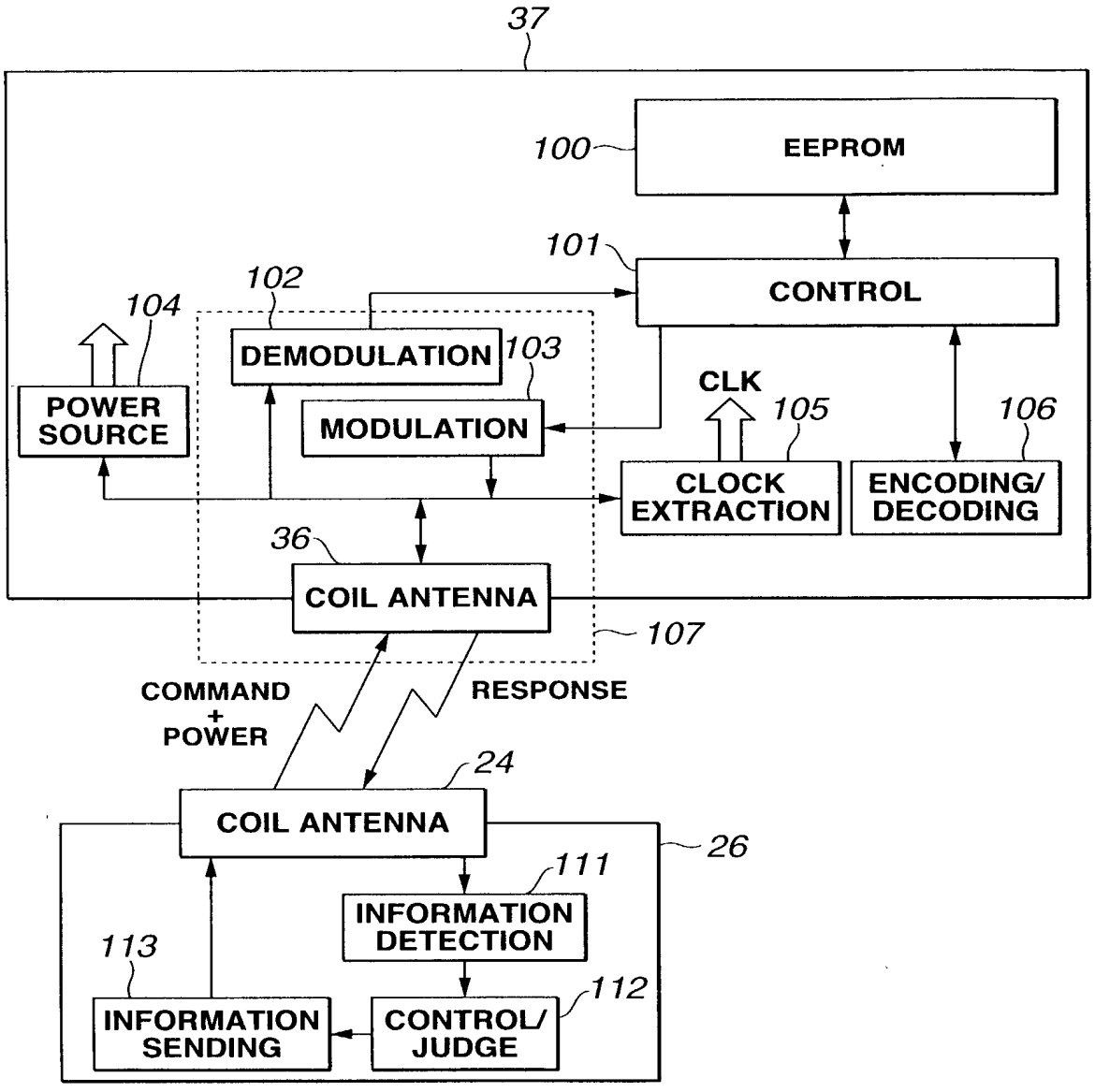

37
100
EEPROM
101
CONTROL
102
104
DEMODULATION
103
POWER SOURCE
MODULATION
CLK
105
106
CLOCK EXTRACTION
ENCODING/ DECODING
36
COIL ANTENNA
107
COMMAND + POWER
RESPONSE
24
COIL ANTENNA
26
111
INFORMATION DETECTION
113
112
INFORMATION SENDING
CONTROL/ JUDGE

FIG.58

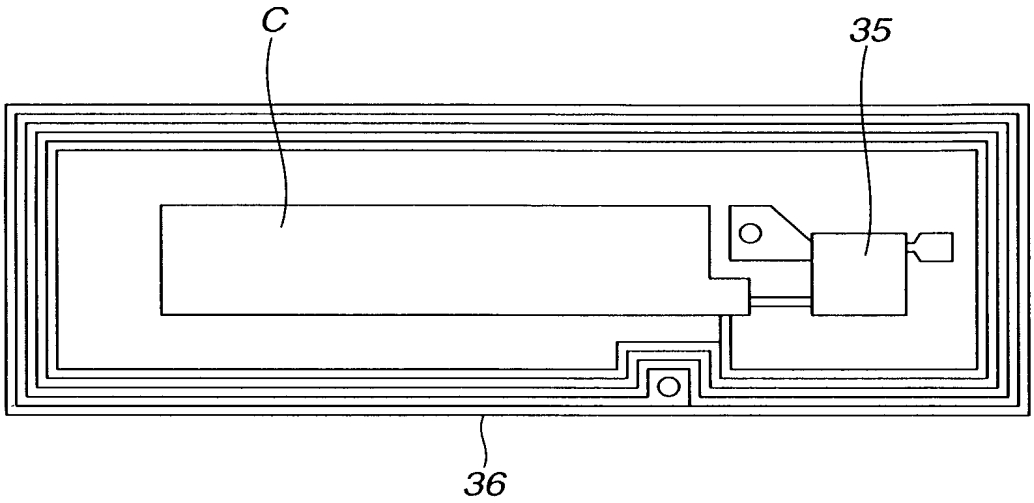


FIG.59

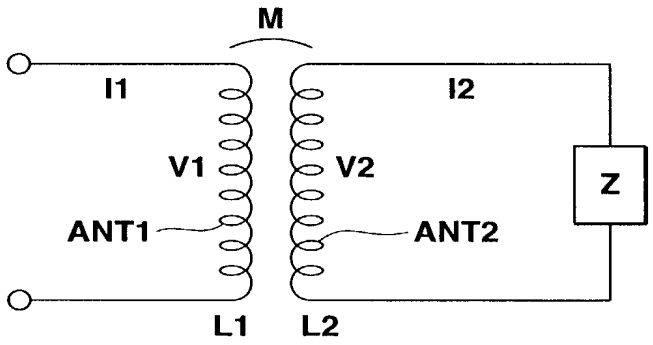
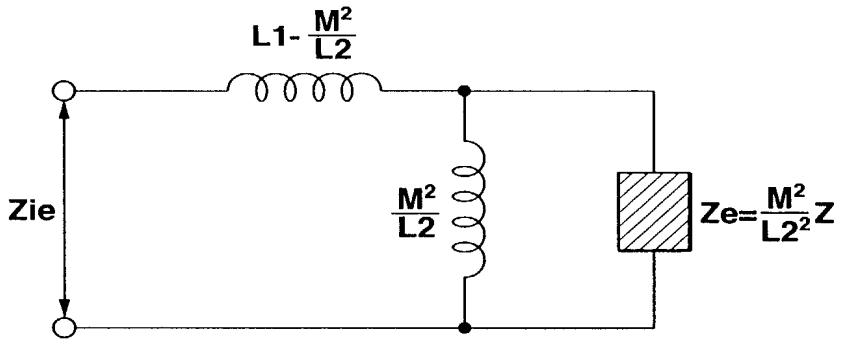


FIG.60



$$Zie = j\omega(L1-\frac{M^2}{L2}) + \frac{1}{\frac{L2}{j\omega M^2} + \frac{L2^2}{M^2 Z}}$$

FIG.61

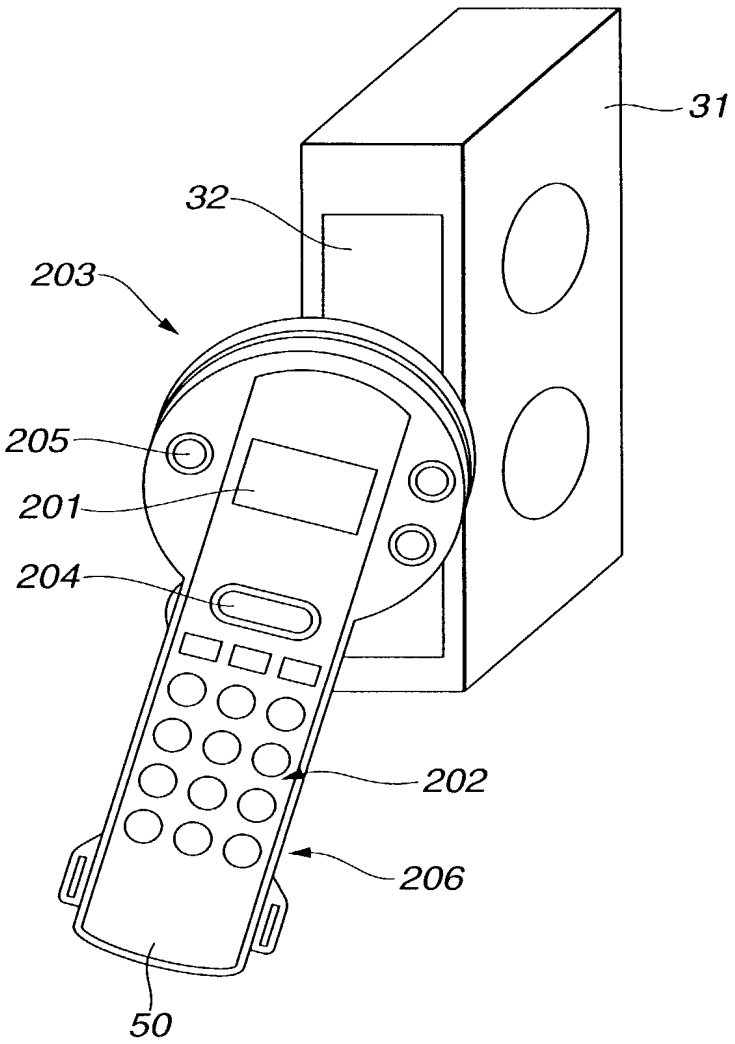


FIG.62